

Vid1Videoserver

www.initsys.co.uk

Installation
Manual
Version 1.5
October 2007

ENGLISH



How much clearer
does it need to be?

Safety Instructions.

The Initsys Vid1videoserver is a low voltage “blackbox” that converts a standard 1vpp CCTV video output to a format that is compatible with the VerifiedAlarms network. It also has a digital input and output that enable the device to signal alarms and switch.

Detailed Safety Instructions

1. Read these instructions carefully.
2. Keep these instructions.
3. Heed all warnings.

VerifiedAlarmsNetwork

How it works.....

Modern network enabled cameras (see <http://www.verifiedalarms.com/camerassupported.html>) can be used as a standalone form of surveillance for a home or a small business or it could be linked to a professionally installed intruder or fire alarm system to give a verification of the nature of the alarm..... Is there really an intruder in the property or is the alarm caused by some other action, for example the weather, lightning, thunder etc. Or has an animal made its way into the building? Or is it a member of staff who has incorrectly operated the alarm?

This flexibility that these cameras provide leads to issues with bandwidth and delivery.

Because of the size of the images and the potentially high numbers of images sent it is necessary to have the remote location on a connection with a huge incoming data "pipe". This way images can be streamed easily and quickly into receiving servers.

VerifiedAlarms operates country servers located currently in the UK, Europe and USA. Other country servers will be added as time progresses (if you are interested in a franchise please contact us at sales@Initsys.co.uk).

These servers are manufactured by Initsys and they, in turn, control a bank of Mass Video Storage Devices(MVSD). Each server can control up to a Petabyte of MVSD.

New MVSD are added from time to time to keep the available space well above the expected demand from subscribers. And we keep our bandwidth controlled so that when you need to send a vital alarm you can.

As soon as an image arrives at a MVSD its location, size and other network information is relayed to the country server and that data is used to decide the next course of action. It could be that you wish to be informed by SMS message or email or indeed you could subscribe to one of our partner commercial Alarm Receiving Stations (ARC) to link the alarm images to actual data from an on-site intruder/fire or other alarm. The ARC operators then have images to verify that the alarm is true or false.

Of course the images remain on the server until they are overwritten or are deleted by the owner.

The owner can view these at any time by simply logging into the country server and selecting the images. This is all achieved through a standard security enabled browser.

Alarms are handled by Initsys Merlin2DotZero the 3rd dimension in alarm handling, incorporating audio and video to alarm data.

Other systems may exist that allow remote transmission of CCTV, but you need to ask yourself....

"Is it a professional service? Does it guarantee delivery of my alarm to the alarm receiving centre? And are my cameras protected from unauthorised viewing by just anyone at any time?"

Vid1VideoServer.

Foreword.



Dear Customer,

For some time the ability to correctly verify that an alarm activation is real, or not, has been impossible or at least very expensive.

VerifiedAlarms gives that capability by utilising the power of networking and smart IP cameras.

This device gives that same capability by connecting older non-compatible equipment to our network.

Please read this manual thoroughly if you have a problem you can use our Bulletin Board (address at the end of the document.)

No matter how you use our servers I hope you have a good experience, if not, send me a mail my address is cberry@Initsys.co.uk

Thank you very much.

Christopher Berry
cberry@Initsys.co.uk

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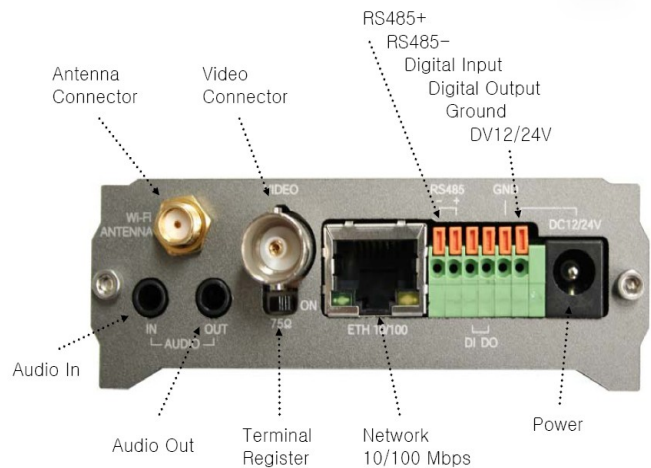
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1. Description

The VerifiedAlarms network is directly compatible with several manufacturers of Digital Video Recorder, Network Video Recorder and Network Cameras. Units that are not directly supported can be interfaced using the Vid1videoserver "blackbox". The following document explains how to connect to the VerifiedAlarms network and ultimately to an off-site event monitoring by a control room.

2. Hardware Overview



Two models exist, a standard wired unit and by special order a wireless version.

Vid1VideoServer.

3. Initial Programming

The Vid1Videoserver default IP address is 192.168.0.200, you will need to have your computer in the same IP range to be able to communicate with the device. There are several options to change the IP address, you can use NetSetup Software from our BBS, use ARP/Ping or login to the device's default IP address and change from the set up.

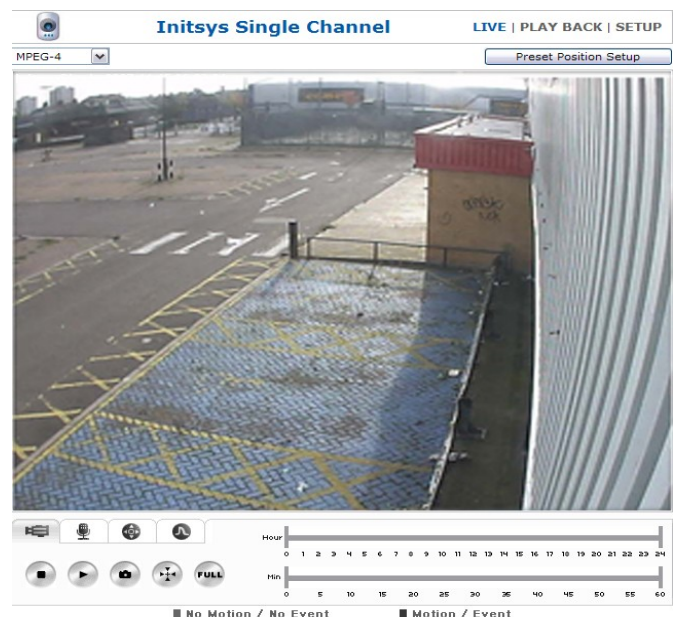


Open the device by typing the URL in the Browser. You must use Internet Explorer with the Vid1VideoServer.

You will need to enter the Username and Password, defaults are:-

Live User - user / user00

Admin User - admin / admin00



☛ **First time login will require the Active X download from the unit, ensure your Pop up Blocker does not stop the device from downloading the control.**

3.1. Image

Initsys Single Channel LIVE | PLAY BACK | SETUP

Video Configuration

Text on Image

Date & Time Display ☒ Enable

Text Display ☒ Enable

Text

MPEG-4 Stream Frame rate ?

	Primary(Default Live)	Secondary
Operation	Enable	☐ Enable Dual Resolution
Resolution	640x480	320x240
Bit-rate Control	☒ Variable bit rate ☐ Constant bit rate (10~1800) 1800 kbit/s	☒ Variable bit rate ☐ Constant bit rate (10~1800) 1500 kbit/s
GOV Structure	IP	IP
GOV Length	32 (1~32)	32 (1~32)
Frame-rate (Live, Record)	30	5

Motion JPEG Stream Frame rate ?

	Primary(Default Live)	Secondary
Operation	Enable	☐ Enable Dual Resolution
Resolution	320x240	160x120
Quality	VeryHigh	Normal
Frame-rate (Live)	30	10

[Save](#)

The video page controls the image quality, compression format and update speed.

The unit can work simultaneously in MPEG4 and MJPEG mode and has two compression options for each mode.

The device is compatible with both Initsys VerifiedAlarms, iRecord and Merlin products.

3.2. Audio

Initsys Single Channel LIVE | PLAY BACK | SETUP

Audio Configuration

☒ Audio

Encoding

Audio Mode

Input Gain

Output Gain

Microphone Power ☒ On

[Save](#)

Set the audio up as follows.

You can test the audio by clicking in the microphone option on the front page and speaking into a connected microphone on the connected computer.

Initsys Single Channel LIVE | PLAY BACK | SETUP

Video Configuration

Text on Image

Date & Time Display ☐ Enable

Text Display ☐ Enable

Text

MPEG-4 Stream Frame rate ?

	Primary(Default Live)	Secondary
Operation	Enable	☐ Enable Dual Resolution
Resolution	640x480	320x240
Bit-rate Control	☒ Variable bit rate ☐ Constant bit rate (10~1800) 1800 kbit/s	☒ Variable bit rate ☐ Constant bit rate (10~1800) 1500 kbit/s
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Motion JPEG Stream Frame rate ?

	Primary(Default Live)	Secondary
Operation	Enable	☐ Enable Dual Resolution
Resolution	640x480	160x120
Quality	VeryHigh	Normal
Frame-rate (Live)	5	10

[Save](#)

3.3. System

 INITIATS
LIVE | PLAY BACK | **SETUP**

Video

Audio

System

Security

Network

Event

Record

PTZ (RS485)

Software Upgrade

System Log

Homepage Layout

Version

Initiats Single Channel

System Configuration

Date & Time	Caution
☐ Set Manually Date(yyyy-mm-dd) 2007-03-28 Time(hh:mm:ss) 10:10:10	☐ Set with Computer time Date(yyyy-mm-dd) 2007-11-18 Time(hh:mm:ss) 16:54:35 IP Address europe.pool.ntp.org Time Zone GMT Dublin,Lisbon,London ▼ Sync Every 24 hours ☒ Enable Daylight saving time

Password Settings

Admin		
ID	Password (6~8 char)	Confirm Password
admin	*****	*****

User		
ID	Password (6~8 char)	Confirm Password
user	*****	*****

Default & Restart

Initialize to Factory default

Restart

This is not normally enabled as most internal networks use DHCP and IP addresses of the connected devices are hidden to the ARC by the VerifiedAlarms Network.

Change the time and date Zone of the system.

The time date is used for reference time interval only for the transmitted video images. It is not used for evidence as the Time/Date of VerifiedAlarms is embedded to the image.

We suggest either using your PC clock or linking to the NTP server address shown. Make sure you have the correct time zone entered for this purpose.

The Username and Passwords should be changed from the default settings. These need to be entered into the VerifiedAlarms Connections and the Monitoring Station informed.

Restart is a soft boot

Factory Default is as is said, you will loose all information if this is selected.

IP allowed addresses can be entered here to increase security – this will ensure that the device will only respond to incoming transmission from the alarm receiving centre (obtain the correct range from your chosen ARC).

3.4. Network

The Vid1Videoserver supports wired connection only, Vid1VideoserverW is available to special order that supports WiFi.

Change the static IP address as required. At least one DNS should be entered, if you do not know the network DNS then use the router address.

Change the Web Server Port to 89XX, ensure this port in the WAN router points to the video server.

Set	IP Address / Subnet mask (bit number: 0~32) (Subnet mask=0 : All IP Accept or Deny)	Policy
☐ 1.		Accept
☐ 2.		Accept
☐ 3.		Accept
☐ 4.		Accept
☐ 5.		Accept
☐ 6.		Accept
☐ 7.		Accept
☐ 8.		Accept
☐ 9.		Accept
☐ 10.		Accept

3.5. Event

Tick the event enable option.

Choose the Primary Motion JPEG option.

Adjust the frame rate, we recommend 2 to 4 fps.

For connection to a DVR/NVR or any other device being used to trigger from a change of contact state then tick the Digital Input option.

Digital Motion sensing can be used for internal applications.

Do not tick Video Loss, the connection is polled from VerifiedAlarms.

Adjust the time Period the input should be active for. We recommend the Schedule is set to All.

Vid1VideoServer.

Tick the FTP option.

Network Address - Enter the Url of the VerifiedAlarms Server you are to connect to.

Upload Path - Enter the Path of the camera you have created on VerifiedAlarms.

Save File Name – please call this image

Username – This is the Admin Username to VerifiedAlarms.

Password - This is the Admin Password to VerifiedAlarms

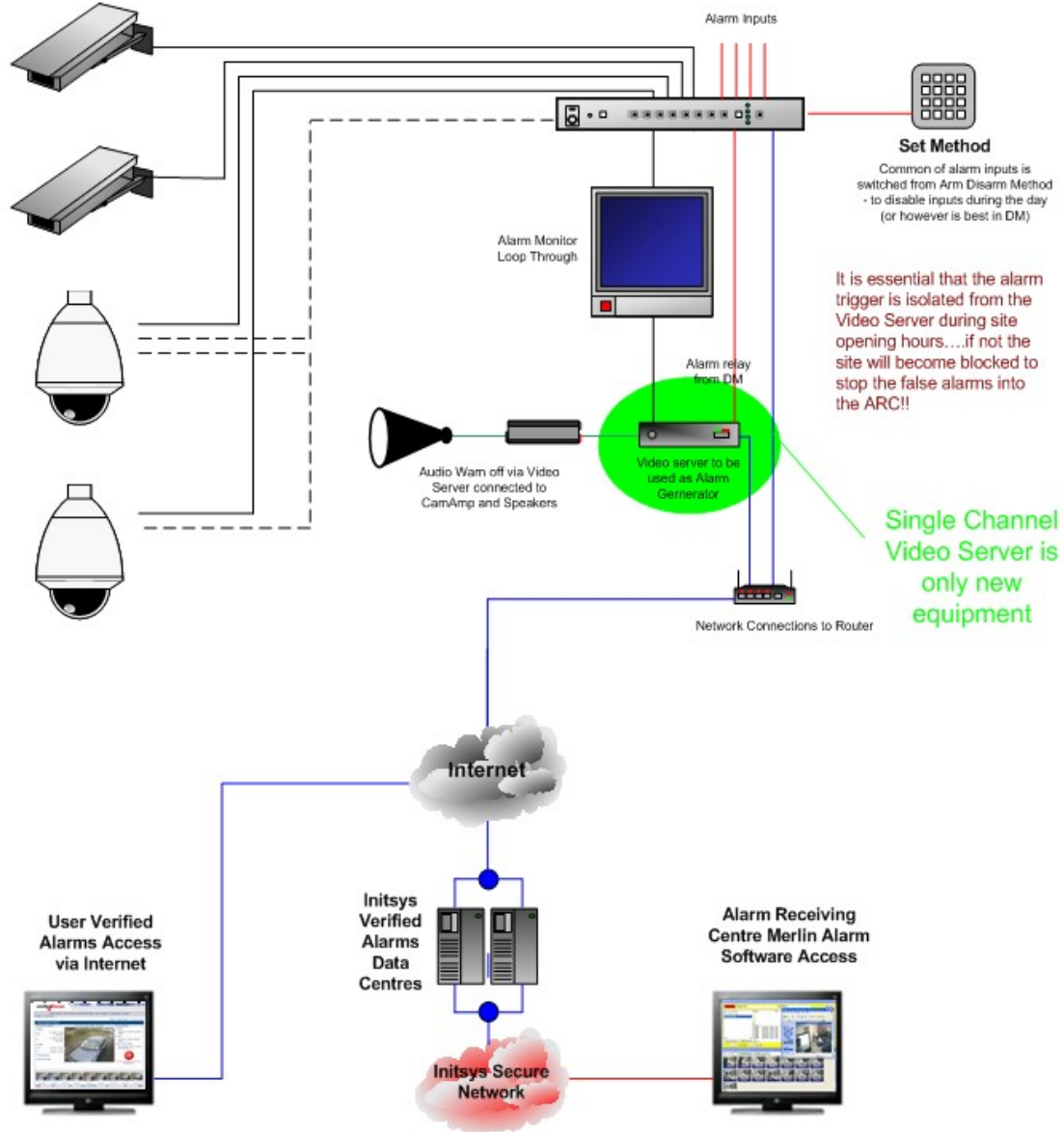
Select the number of Pre and Post alarm images.

For example – we have fps at 4 and pre and post images set to 8 – we will transmit 2 second before the event and 2 seconds after the event with a total of 16 images.

☐ Email	Log	
Attached, Before image number	8 ▼	
Attached, After image number	8 ▼	
SMTP server		
Receiver address		
Sender address		
☐ Enable SMTP Authentication	User ID	
	Password	
	Confirm Password	
Subject		
Message		
☐ Call URL		
URL		
☒ FTP		
Network address	195.10.240.190	
Port number	21 (default: 21)	
Upload path	SecurityInt/Cam01	
Saved File name	image	
User name	remote	
Password	*****	
Confine Password	*****	
Use passive mode	☐	
Before image number	8 ▼	
After image number	8 ▼	
☐ TCP Server		
Network address		
Port Number		
Message		
Message Option (when 'FTP' function is enabled)	☐ include ftp's center image name after Message.	
Save		

4. Example Schematic

Dedicated Micros Digital Recorder Connection to VerifiedAlarms



This solution will provide an alert connection and video stream of the alarm event into VerifiedAlarms / Merlin.

The loop through from the alarm monitor is connected to the input of the video server. When the system is armed and a detection occurs the DM unit will switch it's alarm monitor output which will be buffered in the video server, simultaneously the alarm output which trigger the video server transmitting.

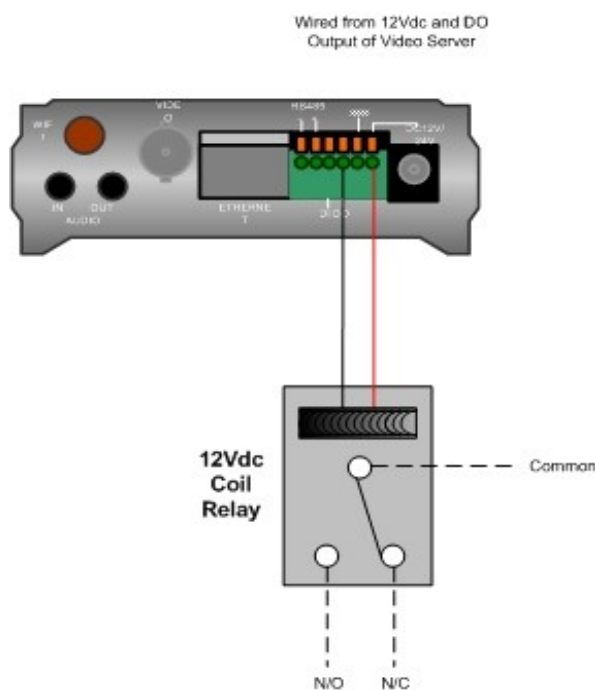
The ARC will receive the alarm event / images which will initiate a procedure to use the DM control commands. To access the cameras live they will connect to the DM box directly through the DM CGI. Pre and Post alarm images may be pulled from the DM box.

The detectors must be wired so that the input can be isolated until the system is armed.



Vid1VideoServer.

5. Relay Control



6. Specifications

6.1. Pin Connections

LED	Color	Indication
Power	Green	Normal operation.
	Off	No power.
Network	Green	Wired: Receiving an IP address from DHCP server. Wireless: Linked to AP and receiving an IP address from DHCP server.
	Off	Wired: Not getting an IP address from DHCP server. Wireless: Not linked to an AP and no IP address from DHCP server. No operation.
Live	Green/Flash	Normal operation. Server is streaming.
	Off	No operation.
Record	Green/Flash	Normal operation. Server is recording by itself.
	Off	No operation.
Status	Green/Flash	Normal operation
	Off	When <i>Preser</i> button is pressed. No operation.

6.2. Led Indications

Function	Pin number	Notes	Specifications
RS485 (+)	Pin 1	A half-duplex RS-485 interface for controlling auxiliary equipment.	Eg. PTZ devices.
RS485 (-)	Pin 2		
Digital input	Pin 3	Connect to GND to activate or leave floating.	Must not be exposed to voltages greater than 12V DC.
Transistor output	Pin 4	Uses an open-collector NPN transistor with the emitter connected to the GND pin. If used with an external relay, a diode must be connected in parallel with the load, for protection against voltage transients.	Max load – 100mA Max voltage – 24V DC (to the transistor).
GND	Pin 5	Ground	
Power input	Pin 6	Electrically connected in parallel with the connector for the power supply, this pin provides an auxiliary connector for main power to the unit. This pin can also be used to power auxiliary equipment with a maximum current of 50mA	Voltage – 12V DC

6.3. Power & Dimensions

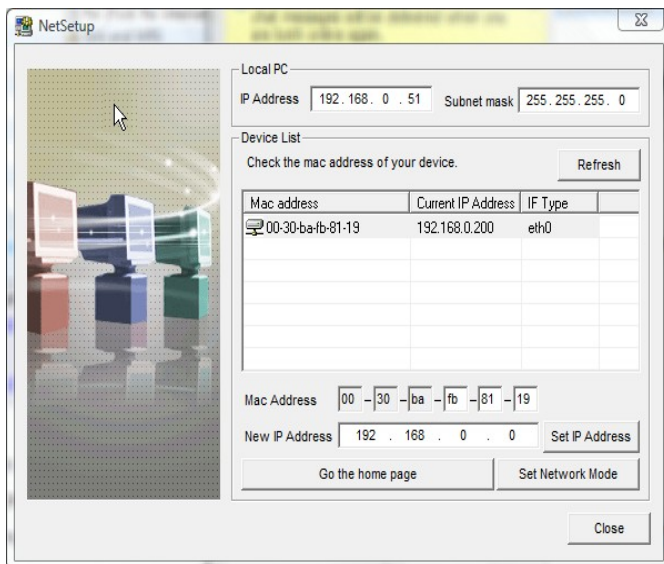
12Vdc 1.25A

Size – 36(H) x 86 (W) x 116mm(D)

Weight – 225g

6.4. Net Set Up

The NetSetUP tool may be downloaded from the Initsys BBS.



6.5. ARP/Ping IP Address Set up

Acquire an IP address on the same network segment your computer is connected to.

Locate the MAC address on the server label.

Open a Command Prompt on your computer and enter the following commands;

Windows syntax	Windows example
arp -s <IP address> <MAC address> ping <IP address>	arp -s 192.168.1.200 00-30-ba-bf-56-10 ping 192.168.1.200
UNIX/Linux/Mac syntax	UNIX/Linux/MAC example
arp -s <IP address> <MAC address> temp ping <IP address>	arp -s 192.168.1.200 00:30:ba:bf:56:10 temp ping <IP address>

Check if the network cable is connected to the server and start/restart the server by disconnecting and reconnecting the power line.

Close the Command Prompt when you see 'Reply from 192.168.1.200:...' or similar message.

In your web browser, type in 'http://<IP address>' in the location/address field and press enter on your keyboard.

Note: The ARP/Ping service is automatically disabled 20 minutes after the unit starts or as soon as IP address is set.

Vid1VideoServer.

6.6. Telemetry Formats

The following formats are supported by the Vid1Videoserver Video Server

Pelco D	Pelco Generic	Pelco DD5-C
Pelco Esprit ES30C/ES31C	Pelco LRD41C22	Pelco Spectra III
Pelco LRD41C21	Panasonic Generic	Panasonic WVCS850/854
Panasonic WVCS850A/854A	Bosch/Phillips Autodome G3A	Vicon SVFT-W23
Lilin PIH-717	Lilin PIH-700	Sensormatic Ultra I
Sensormatic Ultra II	Sensormatic Ultra III	Sensormatic Ultra V
Sensormatic Ultra VII	JVC TKC-676	Ernitec ICU-PTZ-S 51PA
Ernitec Orion 361-312	Kalatel KTD-312	Video Controls Ltd
VCL Orbiter Microsphere	VCL Orbiter Gold	Videor F2
Videor EDC-141E	Videor EDC-142E	Videor EDC-143E

7.0 EULA and Licence.

The VerifiedAlarmsNetwork and Initsys systems is covered by an End User Licence Agreement that governs warranty, limitation of liability, fair use policy and your obligations.

A copy of this document is available to print from the website or is available on request from the Initsys main office detailed below.

Illustration 1 Alarm received in Merlin2DotZero.



The Third Dimension

Contact information.

This document – Vid1VideoServer

www.Initsys.co.uk

☎ +44 1530 262100

☎ +44 1530 260782

✉ Unit 6, Marquis Court, Marquis Road, Rawdon, Moira, DE12 6EJ

